

Appl. No. 10/061,944  
Amdt. dated February 21, 2006  
Reply to Office Action of August 23, 2005

PATENT

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1-46. (Canceled)

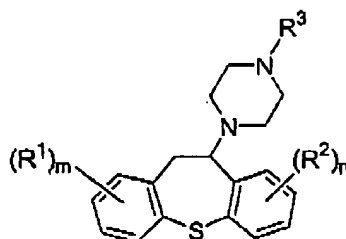
47. (Currently Amended) A method for detecting mutations in cytomegalovirus (CMV), the method comprising:

(a) collecting CMV and/or at least one CMV infected cell from a patient infected with CMV by contacting the blood or a tissue of the patient with a compound that binds CMV and/or a CMV infected cell, whereby CMV or at least one CMV infected cell is bound from the blood or tissue;

(b) obtaining a CMV genome from the CMV or the at least one CMV infected cell collected in step (a); and

(b)(c) genotypically analyzing a segment of the CMV to detect the presence and/or absence of a mutation;

wherein the compound has the formula:



or is a pharmaceutically acceptable salt thereof; and wherein

the subscripts m and n are independently integers of from 0 to 3;

R<sup>1</sup> and R<sup>2</sup> are substituents independently selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>4</sub>)alkyl, (C<sub>1</sub>-C<sub>4</sub>)alkoxy, (C<sub>1</sub>-C<sub>4</sub>)alkylthio, (C<sub>1</sub>-C<sub>4</sub>)haloalkyl, (C<sub>1</sub>-C<sub>4</sub>)haloalkoxy, nitro, cyano, (C<sub>1</sub>-C<sub>4</sub>)acyl, amino, (C<sub>1</sub>-C<sub>4</sub>)alkylamino, and di(C<sub>1</sub>-C<sub>4</sub>)alkylamino; and

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$R^3$  is a substituent selected from the group consisting of (C<sub>1</sub>-C<sub>4</sub>)alkyl, (C<sub>1</sub>-C<sub>4</sub>)haloalkyl and (C<sub>1</sub>-C<sub>4</sub>)acyl.

48. (Currently Amended) The method of claim 47, wherein contacting the blood comprises withdrawing blood containing CMV from the patient and flowing the blood into or through a collector that comprises the compound, whereby CMV in the blood is captured by the compound of the collector.

49-53. (Canceled)

54. (Original) The method of claim 47, wherein collecting comprises placing an implant device that contains the compound in or on the patient such that the implant device is in contact with the blood of the patient, whereby CMV or the at least one CMV infected cell in the blood is captured by the compound of the implant device.

55-59. (Canceled)

60. (Withdrawn) The method of claim 47, wherein if a mutation is detected, the method further comprises determining whether the mutation confers resistance to a pharmaceutical agent.

61. (Withdrawn) The method of claim 60, wherein the method further comprises administering the pharmaceutical compound to the patient prior to the collection step.

62. (Withdrawn) The method of claim 47, wherein collecting comprises placing a transdermal patch containing the compound on the skin of the patient.

63. (Previously Presented) The method of claim 47, wherein the compound is methiothepin as a free base or salt or octoclothepein as a free base or salt.